

Occupational Safety and Health Regulations
and the New Hampshire Fire Service

Executive Leadership

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An applied research project submitted to the National Fire Academy
as part of the Executive Fire Officer Program

December 1998

ABSTRACT

Over the past few years, many valid concerns have arisen from the New Hampshire fire service regarding occupational safety and health. The questions most often heard regarding compliance with health and safety standards are: “Which agency’s occupational safety and health standards, state or federal, take precedence?” What could happen if we do not comply when entering other states in a mutual aid response?

The relationship with federal, state, National Fire Protection Association (NFPA) standards and the New Hampshire Fire Service has always been nebulous at best. New Hampshire (NH) is a non-Occupational Safety and Health Administration (OSHA) plan state for public safety employees and adopts by state statute only twenty standards from NFPA and the Building Officials and Code Administrators (BOCA).

The utilization of the historical, descriptive and evaluative research methods aided in finding answers to the following research questions:

1. What occupational safety and health standards cover the NH Fire Service?
2. What are the viewpoints of NH fire officials regarding occupational safety and health standards?
3. What enforcement practices exist to ensure NH fire department compliance?
4. What actions should NH fire departments take regarding health and safety standards when involved in a mutual aid response across state boundaries?


The procedures included researching occupational safety and health standards from federal and state labor department sources and conducting interviews with senior fire service officials, senior state labor officials and officials from the Federal Occupational Safety and Health Administration and the Environmental Protection Agency.

The research indicated that the fire service in the State of New Hampshire has an adequate understanding of current occupational safety and health standards, however, a more complete awareness of compliance issues, especially when responding across state lines, is needed. The research also indicated that agencies, whether state or federal, would probably not cite a New Hampshire fire department for noncompliance issues.

Recommendations arrived at include: the fire service in the state of New Hampshire should continue striving toward compliance with occupational safety and health standards. The NH fire service should contact federal and state agencies that deal with occupational safety and health issues for assistance.

Finally, the fire departments that border other states and respond on interstate mutual aid calls, should check with that particular state's occupational safety and health department for guidance on what to expect if safety issues arise.

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INTRODUCTION

A safe workforce is vital to any organization, business and industry anywhere in the world. The workforce in the United States (U.S.) is fortunate to have many federal and state agencies and national labor unions that promote safe working environments.

It is indeed unfortunate that many members of the workforce and many employers consider workplace safety issues as a hindrance to their productivity. Could this restrictive state of mind be based on fact? Could those restrictions to compliance come from the fact of too many cooks in the kitchen? Could there be too many agencies that promulgate health and safety standards that ultimately end up confusing the very people that they are supposed to protect?

The purpose of this research project, through the historical, descriptive and evaluative methodologies, was to focus on and clarify the current situation regarding health and safety standards and their relationship to the New Hampshire Fire Service. The following research questions are answered by this study:

- 1.What occupational safety and health standards cover the New Hampshire Fire Service?
- 2.What are the opinions of New Hampshire fire officials regarding occupational safety and health standards?
- 3.What enforcement practices exist to ensure fire department compliance?
- 4.What knowledge should New Hampshire fire departments have regarding health and safety standards when responding in a mutual aid capacity across state boundaries?

BACKGROUND AND SIGNIFICANCE

The National Fire Protection Association (NFPA) has released its latest set of statistics on U.S. fires in 1997. Public fire departments responded to 1,795,000 fires last year; that's down 9.1 percent from 1996, but it still means that a fire breaks out somewhere in the country every 18 seconds. According to the NFPA, there were 552,000 structure fires last year, 406,000 of them in residential properties. There were 397,000 vehicle fires and 856,000 fires in outside properties. (Eisner, 1998)

In New Hampshire, there were 2,483 responses reported to the State's Fire Marshal's Office (NHFMFO) 230 New Hampshire fire departments through the National Fire Incident Reporting System. These reported incidents included 840 structure fires, 545 vehicle fires and 1,098 outside fires. The total estimated dollar loss stands at \$8,527,618. These figures translate into one fire every 3.5 hours and bear in mind only this is only about 18 percent of the departments reporting.

The population of the entire New Hampshire fire service stands at about 7,700 members and they protect 1.2 million people. The actual make up of the service is: 3,200 call personnel (those that are paid on a per call basis), 3,000 volunteer personnel (those accumulating no pay at all) and 1,200 career personnel (those that are paid as part of their job). These personnel are the core of the 230 municipal fire departments in our state.

As is apparent from the information above, the New Hampshire fire service parallels the national statistics in many ways. Also apparent is the fact that New Hampshire fire service members are at risk as are any other fire services in the nation.

Unfortunately, not as apparent are the health and safety standards that cover the New Hampshire Fire Service member. The fact that the state of New Hampshire is not an OSHA Plan State for public employees obscures compliance issues as the thought that nothing exists to comply with prevails.

The New Hampshire Fire Academy serves many roles in relation to the fire service in New Hampshire. The obvious responsibility is to train firefighters in the art and science of firefighting. A not so obvious role is the responsibility to disseminate information relative to fire and rescues, techniques of firefighting and rescuing, fire prevention, fire administration, and other related subjects to all interested agencies and individuals throughout the state. This portion of the charge to the fire academy by state statute is the fashion to which this project relates to the author's organization. Also the employees of the Division of Fire Training are considered part of the New Hampshire Fire Service and could be subject to many of the same safety and health standards.

The impact of this research problem is the fact that all New Hampshire fire service members are covered by the issue. The communities that have a more difficult role in this safety issue are those that border neighboring states and regularly participate in mutual aid responses across state lines. New Hampshire shares borders with three states and the country of Canada. The questions that confront the border communities are, do we need to comply with that state's occupational safety and health standards? If so, what are those standards? If we do not comply with that state's standards, what will happen as a result?

Another complicating compliance factor is that 25 towns border the state of Vermont, which is an OSHA Plan state, 18 communities border Massachusetts, a non-OSHA plan state and 18 communities border Maine, another non-OSHA plan state. The results of non-compliance may prove to be devastating to a small volunteer department with scarce resources especially if the neighboring state's safety and health compliance guidance includes citation powers with penalty assessment provisions.

This project relates to Unit 7 of the Executive Leadership program in the fact that the research was essentially completed in order to assess the organizational culture of the New Hampshire fire service with respect to the important assumptions that exist concerning health and safety standards. It is these assumptions when coupled with actual experiences that will help to accurately chart the course for occupational safety and health issues in the future.

LITERATURE REVIEW

A safe work environment is vital to the economy and productivity of any nation, state and community. A safe work environment permits employers and employees to pursue their personal and professional lives with vigor for they are not burdened with the overriding fear of being injured or killed in the workplace.

A safe work environment is dictated by state and federal regulations and required by organized labor. It is also a requirement of a cost effective operation. Although difficult to quantify precisely, the cost of job related injuries incurred by employees in the work setting is a major contributor to the rising costs of pensions, workers compensation, and medical insurance.

As municipalities attempt to control personal service costs, the cost effectiveness of a proactive safety program becomes readily apparent in both the public and private sectors. It is not uncommon to find evidence of 30-60 percent decreases in the direct costs of job related injuries where a good safety program has been instituted. (Forsman, 1988)

The above information essentially sets the stage as to why there are so many efforts to offer guidance in ways and concepts of protecting the American worker. The following will serve as a short history of occupational safety and health laws in the United States.

As early as the 19th century states created laws for worker safety. Soon after statehood was granted in 1837, Michigan adopted worker safety laws, and started a factory inspection program in 1893. Massachusetts issued occupational safety rules around 1875. Iowa began collecting worker injury and illness statistics in 1884, and also began inspecting factories in an attempt to reduce accidents. In 1889, Washington built worker protection into the state's constitution, requiring the legislature to pass necessary laws for the protection of persons working in mines, factories and other employments dangerous to life or deleterious to health; and fix pains and penalties for the enforcement of same. California began operating a safety enforcement program in 1913. Oregon adopted workers compensation law in 1913, which included provisions for the inspection of certain hazardous industries. (OSHSPA,1998)

In 1917, New Hampshire established a basic code of safety and health

regulations for all employers with one or more employees who were regularly employed. The law, RSA 277 – Safety and Health of Employees, covered such areas as: building construction and repair work, maintenance of first aid equipment, appliances, etc, inspections and orders by Commissioner of Labor, reviews and appeals, inspectors and other assistants, and prosecutions, penalties etc. This law was revised several times since its adoption and was enforced by the New Hampshire Department of Labor (NHDOL) until 1970.

On June 30, 1936, the federal government passed the Walsh-Healey Act, which was the first attempt by the government to pass all encompassing safety and health standards. During the time period of 1958 – 1969 four other federal acts concerning health and safety were passed and ultimately absorbed on December 29, 1970 by the Occupational Safety and Health Act (OSHA) of 1970, Public Law 91-596. Since 1970, this legislation has been amended twice once on November 5, 1990, Public Law 101-552 and again on July 16, 1998, Public Law 105-198 as the OSHA Compliance Assistance Authorization Act of 1998.

These latest amendments still include the basic concepts that provide for the general welfare of the American worker and that preserve our human resources. States and territories may elect to develop their own unique safety and health program. These state plans are approved and monitored by the federal Occupational Safety and Health Administration (OSHA) , which provides up to 50 percent of an approved plan's operating costs. A state plan program, including the job safety and health standards are required to meet must be at least as effective as OSHA. Benefits of a state plan include coverage for public sector

employees, and the opportunity to promulgate unique standards or to develop innovative programs which address the types and hazards specific to each states' workplaces. (OSHSPA,1998)

The state of New Hampshire has not elected to develop its own occupational safety and health program and consequently relies on the federal occupational safety and health guidance to protect private sector employees. Further, the Occupational Safety and Health Act of 1970 specifically excludes all employees of public agencies of the states from coverage by OSHA. Plan state for public employees. Therefore, technically, the fire service in the state of New Hampshire is not covered by the federal Occupational Safety and Health Administration. New Hampshire is one of 29 states and the District of Columbia to be in this position. Also, with the passage of the OSH Act of 1970, New Hampshire RSA 277 became enforceable only in the public sector, covering such employers as cities, towns, counties and the state. The characteristic of RSA 277 is that is a general coverage document, as described above, and does not offer specific safety and health guidance to the firefighter or the fire department. The bottom line is the New Hampshire fire service is not specifically covered by fire service specific state or federal occupational safety and health statutes.

In 1998, Administrative Rules for Safety and Health, Chapter Lab 1400, were promulgated under the statutory authority of RSA 281-A:64 and RSA 277-A:60. These rules apply to all buildings, offices or other sites owned or leased by any employer in the State of New Hampshire. Consequently, all fire service personnel are covered by these rules. Unfortunately, the rules are very general in nature and offer few specifics regarding the fire service. (See Appendix B for the complete text of RSA 281-A)

There are 21 States and Territories that have developed state plans to cover both public and private employees. Also, there are two states that have state plan programs to cover public employees only. In these two cases, the Federal OSHA covers the private sector employee. (See Appendix A for a listing.)

Public Law 99-499, the Superfund Amendments and Reauthorization Act of 1986 (SARA) became effective on January 29, 1986. In this federal legislation lies one of the most used documents in the fire service in relation to worker protection standards. Section 126 of Title I of the document is actually entitled Worker Protection Standards. This section was developed by the federal Occupational Safety and Health Administration and the emergency response section is a part of the Code of Federal Regulations as Title 29, Part 1910.120 (q). In this document are the requirements for the training of first responders to hazardous materials incidents. This is the legislation that defines responder training levels as Awareness, Operational, Technician, Specialist and Hazardous Materials Instructors. Also contained in the verbiage is the requirement to utilize an incident command system when operating at the scene of hazardous materials incidents. This part of the federal safety and health regulations gets the most attention from the New Hampshire fire service as the Division of Fire Standards and Training / New Hampshire Fire Academy (NHFA) has developed all of the current hazardous materials certification programs to follow this OSHA standard.

As has already been stated, New Hampshire is a non OSHA plan state. Realistically, this means that the federal standards lose clarity with enforcement activities in New Hampshire and the 28 other states and the District of Columbia that are in the same situation.

Section 126(f) of SARA requires the Administrator of the U.S.

Environmental Protection Agency (EPA) to promulgate standards identical to those contained in the section 126(a) OSHA regulations (codified at 29 CFR 1910.120). The EPA regulations (codified at 40 CFR 311) cover State and local government employees in States that are without an OSHA approved State plan under section 18 of the OSH Act. (EPA, 1989)

Consequently, in those states and one district, “EPA’s (U.S. Environmental Protection Agency) authority extends to state and local government employees conducting hazardous waste operations and emergency response in states that *do not have in effect a delegated OSHA program*” (EPA, 1991) through EPA, 40 CFR, Part 311. (See Appendix D for further information.) This means that the EPA is responsible for the enforcement of OSHA 1910.120 in the non OSHA plan states, including New Hampshire.

The only national fire organization that has developed a comprehensive fire service specific occupational safety and health standards is the National Fire Protection Association (NFPA). This non profit entity has composed nationally accepted standards for hazardous materials response (based on OSHA 1910.120(q). These standards are numbered NFPA 471, Procedure for Response to Hazardous Materials Incidents, NFPA 472, Requirements for First Responders at Hazardous Materials Incidents and NFPA 473, Requirements for Emergency Medical Personnel at Hazardous Materials Incidents. These particular standards were first published in 1989 and are periodically updated through the consensus standards process by representatives of industry, fire service and the chemical industry.

The NFPA also has developed a standard entitled NFPA 1500, The Fire Department Occupational Safety and Health Program. This guidance is the most specific and comprehensive document to date regarding the safety and health of firefighters.

The State of New Hampshire, Division of Fire Safety, Fire Marshal's Office (NHFMO) enforces codes and /or standards that are adopted by reference by the state legislature. Currently, there are 20 codes and standards that are part of the New Hampshire State Fire Code and unfortunately, from a safety standpoint, NFPA 1500 is not one of them. (See Appendix C for the complete list of codes and standards currently in effect)

At this point, there are six different agencies that have or could have something to do with the occupational safety concerns for the fire service in New Hampshire. Four of them have enforcement provisions, OSHA, EPA, NHDOL, NHFMO and two are advisory in nature, NFPA, NHFA.

Up to this point, discussion has centered around the agencies that are involved in the adoption, enforcement and utilization of safety and health standards. It is time now to compare national and state firefighter injury statistics in order to focus on the need of occupational safety and health standards in the State of New Hampshire.

As mentioned earlier in this project, there are approximately 7,700 members of the New Hampshire fire service. For the calendar year 1997, 36 fire service injuries and 0 deaths were reported to the State Fire Marshal's Office by 42 New Hampshire fire department through the National Fire Incident Reporting System (NFIRS). This result translates into 1.2 injuries per reporting jurisdiction (see Appendix E for more details).

In the United States there are approximately 14,000 fire departments that participate in the NFIRS system (USFA,1997). “The number of firefighter injuries has changed little over the ten year period (1985-1994). They averaged about 100,000 per year.” (USFA,1997). The national average for injuries per department (based on the above) for the years 1985 -1994 calculates out to be 7.1 injuries per department. Those numbers are high, however, the ten year trend for injuries sustained on the fireground, which “constitutes about 55 percent of all firefighter injuries” (USFA,1997), is a reduction of 13 percent and a reduction of 2 percent was recorded for all firefighter injuries. (USFA, 1997)

“Over the period 1985 –1994, there has been a significant downward trend in firefighter deaths per year” (USFA,1997). The ten year trend shows a reduction of 35.3 percent (USFA, 1997) “The NFPA has reported that on duty firefighter deaths in the United States totaled 92 in 1996, six more than the year before, but the fourth year in the last five that the toll was fewer than 100” (Baltic,1997). The “ fireground deaths in 1994 accounted for 58 percent of total deaths, an increase of 77 percent over 1993 (USFA, 1997). Could the fact of increasing regulations and standards be a contributing factor toward these reductions?

An example of a recent OSHA regulation that has caused discussion within the fire service is the OSHA regulation CFR 29. 1910.134, Respiratory Protection Standard. This standard requires that

“when firefighters enter a burning structure (an atmosphere that’s “immediately dangerous to life and health”), they must do so in groups no smaller than pairs, who must remain in visual contact. The rule also

requires that there must be at least one additional team of at least two firefighters immediately available, with full personal protective equipment, to undertake any rescue of the firefighters in the structure.

The two-in/two-out rule doesn't apply equally in every state, however. In so called OSHA states, where OSHA enforces the Occupational Safety and Health Act of 1970, directly, the regulation applies only to federal fire departments and private sector fire brigades, not to public sector fire agencies.

In the 23 state plan states, where state governments have previously agreed to adopt and enforce occupational safety standards that are at least as strict as those imposed by OSHA, the two-in / two-out rule, does apply to public sector fire departments". (Baltic,1998).

The discussion within the fire service deals not with the fact that the two-in/two-out guidance can aid in many operations, but with the fact that "to some chiefs, two-in / two-out is the latest in a long chain of unfunded mandates dropping from the federal level to state and local governments". (Baltic,1998)

In a recent survey conducted by Fire Chief magazine in July 1998, responses from fire service leaders included: "I'm tired of mandates being handed down with no type of financial assistance to meet them, complained a chief from New England. Despite what some people say, these things do cost money". (Baltic,1998)

Fire service leaders are aware of the importance of safety on the fireground however another quote from the survey relayed "Safety is the absolute most important thing in the operations of this department, and increased legislation would most probably

be detrimental to operations and service delivery”, Chief Lee Koontz, Euless, Texas (Baltic,1998)

“Other chiefs, while acknowledging the cost element, were a little more philosophical about the situation. “We brought this on ourselves”, said Chief Jackie Carner, Sapulpa (Okla.) Fire Department. “When the fire service continually kills a hundred or more firefighters a year without any real successful reductions, then somebody had to step in and make us do a safer job.”

(Baltic,1998)

Another recent effort that attempts to increase the safety of fire service personnel is the Superfund Amendment and Reauthorization Act of 1986. This is the legislation that requires fire departments to train their personnel to specific levels based on their operational responsibilities and to also utilize an incident command system when handling emergencies involving hazardous materials. The background research effort that was undertaken included reviewing all operations at hazardous materials incidents from around the world. Some of the similarities regarding fire service safety that were identified were lack of training specific to hazardous materials and lack of consistent command structures. This is yet another case, as above, regarding the fact that the fire service was not protecting itself well enough and a federal agency stepped in to offer guidance to help. The federal agency was the same one that promulgate the two-in/two-out rule, OSHA. As stated earlier, in non OSHA plan states, the EPA has jurisdiction for enforcement issues of SARA. Subsequently as a result, this legislation covers the entire nations public and private fire service.

Perhaps the best way to sum up the need for fire service occupational safety and health programs is “The yearly statistics prove that the lack of personal responsibility toward one’s own health and safety kills firefighters. All of us, whether volunteer or career, must assume the responsibility” (Stevens, 1998)

In conclusion, there are many state, federal and non profit agencies that have strong interests in protecting the safety and health of the New Hampshire fire service. The hard part for many New Hampshire fire service leaders is sorting out which agency can do what for whom and then attempting to figure out which agency will do what to whom in addition to the normal daily routine. Further, once the fire service leader has accomplished those tasks, he or she must then try to sort out what, if anything, needs to be done in the same regard when responding to mutual aid requests into neighboring states that may or may not be OSHA plan states. Complicated? Yes! Time Consuming? You bet! Necessary? Absolutely, there is nothing more important than to protect the safety and health of the fire service members.

“We ask a lot of officers and firefighters today. The profession has become much more technical than 20 years ago. The dangers that we face today from hazmat and terrorists were unheard of then. Our young people are better conditioned and more intelligent than their predecessors. As commanders we really have only one responsibility and that is to keep our people safe. I believe we need to worry less about the political expedient and more about our people. Let’s get back together and re-address our attitudes, our training and our approach to manning, and perhaps prevent another “kid” from not going home.” (Smith, 1998)

PROCEDURES

This research project utilized historical, descriptive and evaluative research methodologies to study occupational safety and health standards and legislation in relationship to the New Hampshire fire service. The research also included seeking information on neighboring states policies regarding the safety and health of fire service personnel when entering said state while responding in a mutual aid capacity.

The literature review involved researching the history of the federal Occupational Safety and Health Administration, the history of New Hampshire occupational safety and health standards through written documents in hand and those as part of the agency's internet web site. Further, national fire service trade journals were researched in order to attain, incorporate and compare the latest feelings of fire service leaders from around the nation with those of New Hampshire fire service officials. The final portion of the literature review dealt with obtaining the most current death and injury statistics for New Hampshire fire service personnel from the New Hampshire Division of Fire Safety, the State Fire Marshal's Office. (See Appendix E)

Telephone interviews were conducted with New Hampshire fire service leaders during the months of November and December 1998 in order to again capture the latest sentiments of the leaders with regards to occupational safety and health in the fire service. The fire service leaders that were contacted were chosen based on their position in the fire department either Senior Deputy Chiefs or Chiefs as this level of the command structure would have the benefit of experience with and departmental knowledge of their local safety and health efforts and policies.

Fire Departments to contact were chosen based on their type of department. In New Hampshire there are basically four types of fire departments: career, volunteer, combination : volunteer with career personnel, and call personnel with career personnel. (Call personnel are partially paid, usually by the hour, while at an incident.) For the purposes of this project, there was no distinction made between the two types of combination departments.

The representative Fire Departments were also chosen based on their geographic location in the state in order to ascertain regional attitudes if any. (See Appendix F for a location map) The number of departments arrived at was based loosely on the numbers of each type of department (as above) in the state and in no way reflects a representative sample.

The Interview process itself was semi-structured as far as there was an question / interview sheet constructed for each fire official / department / agency. (See Appendix G) All questions on the sheet were asked of all participants and follow up questions were based on the responses to the written questions in order to fully appreciate the official's position on the subject. (See Appendix H for a listing of all officials contacted)

Interview questions and sheets were also constructed and utilized for the Federal Officials representing the Occupational Safety and Health Administration, Regional Office in Concord, NH and the Environmental Protection Agency, Regional Office in Boston, MA. (See Appendices I and J respectively)

Finally, Interview questions and sheets were constructed and utilized for the State Labor Officials from New Hampshire, Vermont, Maine and Massachusetts. (See Appendix K for the NH version and Appendix L for the other states).

The procedures used to complete this project were based on the following criteria. First, it was assumed that all authors included in the literature review accomplished objective and unbiased research in their work. Secondly, the responses to the questions during the interviews were provided completely and honestly to the best extent of their knowledge.

The limitations of the research included the fact that the numbers of respondents to the questions, particularly those from the fire service, were not large enough. While the responses to the inquiries were adequate, they probably did not encompass all of the varying viewpoints that exist regarding occupational safety and health issues. The six month completion window from the National Fire Academy does not lend itself well to the concept of telephone tag when trying to contact and re-contact the varied and busy audience that is the core of this project. More contacts are needed to fully verify the findings of this report.

RESULTS

1. What occupational safety and health standards cover the New Hampshire Fire Service?

The research indicated that New Hampshire Fire Service personnel are covered by numerous state and federal requirements in regards to occupational safety and health issues. To start with and at the state level, The New Hampshire Department of Labor provides general guidance for any public employee in regards to safety. As far as specific guidance geared specifically to fire departments and fire personnel, none exists. There are a few crossover areas contained within the general guidance document, Chapter Lab

1400: Safety and Health of Employees (Appendix B). These most common areas are (but not limited to) confined space entry, personal protective equipment and respiratory protection.

As far as federal requirements are concerned, there are basically two that cover public safety employees. Taken in chronological order, the first is The Superfund Amendment and Reauthorization Act of 1986, Title III. In this act the section that is adopted by reference from the Occupational Safety and Health Administration is CFR 1910.120(q). Even though this is an OSHA regulation, it still covers the public safety employee in New Hampshire. The enforcing agency is the Environmental Protection Agency which has enforcement powers in all 50 states and U.S. territories.

The second regulatory standard that covers most public safety employees, provided that state has an approved OSHA plan is CFR 29 1910.134, the Respiratory Standard. This standard covers, among other items, the two-in / two-out rule for fireground operations. This standard does not directly apply to the New Hampshire fire service as New Hampshire is not an OSHA plan state for public employees.

Adjoining states safety and health guidance applies only through the State of New Hampshire Department of Labor (NHDOL), by reference from the adjoining state, if forwarded to NHDOL.

2.What are the viewpoints of New Hampshire fire officials regarding occupational safety and health standards?

The results of the telephone interviews indicated that the view / beliefs regarding safety and health standards are as diverse as the number of people interviewed. Responses to the question 1 of the Interview Questions (Appendix

G) varied from intimate knowledge of the OSHA standards to just a bare awareness that the standards exist and that bare knowledge comes from their respective place of employment and not from the fire service.

Answers for question 2 – which standards are you most familiar with?

The respiratory standard, bloodborne pathogens standard and confined space were the areas personnel were most familiar with.

Question 3 responses as far as using OSHA guidance for developing standard operating procedures (SOP's) were prevalent in 6 out of 8 departments. All departments were aware that New Hampshire is not an OSHA plan state for public employees and 6 of 8 departments were aware that the NHDOL was responsible for health and safety standards in New Hampshire.

Question 4 responses ranged from OSHA standards having high importance in the operation of the fire department (10,9,8,8) to medium importance (5,5,5) to little importance (1) on a scale of 1-10, with 10 being the highest level of importance. The fact that became apparent was, the smaller the department, the less understanding they had and the less they relied on the OSHA standards for guidance.

3.What enforcement practices exist to ensure NH fire department compliance?

The short answer to this question is: essentially none.

Based on interviews with OSHA, EPA and adjoining State Labor Divisions, the enforcement of any safety and health standard will be in accordance with the NHDOL.

All of the agencies queried advocated a message of gentle compliance and a message of

help is available from any agency in regards to compliance issues. They do not have active enforcement programs that relate directly to occupational safety and health standards for the fire service. However, in the event of a death of a firefighter, there will probably be an investigation into the circumstances surrounding the incident. The astute fire department, in this case, will have proper documentation of striving to attain compliance in order and ready to go.

Over the past year, the NHDOL has hired 5 safety consultants to start to work with and enforce the New Hampshire Administrative Rules, Lab 1400: Safety and Health of Employees. These consultants are charged with the responsibility to enforce Lab 1400 in all municipalities of the state. The process has already started and the towns of Salem, Bethlehem and Dublin have already been visited by these officials. Fines for non compliance can reach to \$70,000, depending on the severity of the violation.

As far as fire departments are concerned in this effort, they too can be cited for non compliance, but it will be as a result of the overall investigation into the specific town or city. The process at the time of this project, is complaint driven.

4.What actions should NH fire departments take regarding health and safety standards when involved in a mutual aid response across state boundaries?

In regards to mutual aid responses to adjoining states and occupational safety and health concerns, there is no coverage afforded to the out of state responder. In January of 1992, the Claremont Fire Department (NH) responded to Windsor, VT on a mutual aid response to a chlorine cylinder leak at the Windsor Water Treatment plant. The incident

was successfully handled by all that responded and no injuries to responder personnel occurred. There was an injury to a worker, before the response by fire service personnel.

A few days later, the VT Division of Labor and Industry issued citations to the Claremont FD based on their mutual aid response to Windsor. (Vermont is an OSHA Plan state with its own state occupational safety and health program and New Hampshire is not) This was the first time a New Hampshire fire department was cited for violations of occupational safety and health guidance in the history of the state, let alone being cited from an out of state agency. (See Appendix M for details and copies of citations) The action of citing a New Hampshire fire department for violations during operations in a neighboring community through a mutual aid response led to removal of mutual aid responses to any Vermont community by the Claremont Fire Department. A serious result of occupational safety and health enforcement attempts across a state border.

After a period of time, many meetings and much political force, the citations were removed and the NHDOL was advised of the reported violations. Also notified of the incident and its surrounding controversy was the EPA, as they ultimately have jurisdiction in non OSHA plan states. That is where the action stopped and that is the current way of doing business regarding response to adjoining states, especially Vermont. The answer to this question should be quite obvious. The actions that the New Hampshire fire service should take is to start to become familiar with neighboring states occupational safety and health standards, whether or not compliance is an issue. There are 25 fire departments on the VT / NH border, 18 fire department on the MA / NH border and 18 fire departments on the ME / NH border. The potential for these 61 departments to visit the neighboring state is great. The potential for more departments to

operate in adjoining states is also high as many departments respond out of state even though they do not border the state directly.

The 25 New Hampshire communities that border Vermont should be aware that Vermont is an OSHA Plan state and is aggressive in following up on workplace injuries. Even though Vermont OSHA was unsuccessful in citing a New Hampshire fire department directly in 1992, VT OSHA will contact the New Hampshire Department of Labor in the event of difficulties encountered during mutual aid responses by New Hampshire fire departments.

The 18 Communities that border Maine need to be aware that Maine Department of Labor (MEDOL) has adopted all of the OSHA standards except for the Respiratory Protection Standard, CFR 29 1910.134. as of this writing. Adoption of the Respiratory is expected by the middle of 1999. Maine Department of Labor Officials will also work with the NHDOL when sorting out issues regarding safety and health. To date, MEDOL has not cited any NH department for safety issues and probably would not.

Those 18 communities that border Massachusetts will have to do a little more work when trying to determine which safety and health standards to comply with when working mutual aid incidents. Each individual New Hampshire fire department should contact the neighboring community in Massachusetts for information of what that community requires for safety and health standards. Each community in Massachusetts is responsible for its own safety and health standards. Another place to review safety standards might be the mutual aid agreements between individual towns and communities and / or the regional task forces in Massachusetts.

The most startling unexpected result found as a result of the research was the fact of the hosting department in a mutual aid response. The host department is the one in which the large incident has occurred and the department needs help in order to stabilize the situation. The result comes in the form of a question. Does the hosting department put itself at risk or increase its liability when asking for help from other states fire departments' that may or may not comply with the host's state occupational safety and health programs? An answer to this question was not easily arrived at by those officials contacted.

DISCUSSION

The issue of occupational safety and health deserves greater attention than currently exists in the New Hampshire fire service both by the departments themselves and by the agencies that enforce the guidance. The results indicate a level of complacency when discussing safety and health issue compliance. The officials of the departments seem to understand that enforcing agencies exist but the safety and health agencies really have no strong enforcement policies. This can be a dangerous understanding and one to easily pass off as I don't have to comply because there is no one that can make me comply.

More issues that arose as a result of the research include the time factor and the money issue. The departments that had full time (career) personnel seemed to have a greater sense of the safety and health issues, probably as a result of being able to spend the time in order to understand the issues. Also, the career departments were farther ahead with their in house safety programs as they could afford to purchase the necessary publications and spend time trying to understand the issues. Should the larger career

departments have better safety programs just because they can afford them and the volunteer, call, and small career departments not have them because they can't afford them. True, the larger departments have more responses and experience but it is the small departments that are the largest in fire service membership and expose the most firefighters to unsafe conditions without having the luxury of time and funds to develop the programs. Safety should not be a result of affluence, safety should be across the board, the same for all.

There are no fully empowered occupational safety and health enforcement agencies in existence for the New Hampshire fire service, as yet. Departments still need to regard the existing safety and health guidance and utilize the guidance to their advantage. There is a concept of law that called standard of care. Standard of care relates to all past and present practices in any particular area. In this case, the current standard of care as it relates to safety and health issues includes all published and unpublished guidance on the issue. Therefore, not only do the OSHA and EPA standards apply, not only does the state rules guidance apply but the NFPA 1500 standard – Occupational Safety and Health Program for the Fire Service applies also. Further, the concept of standard of care applies to all that are affected by the issue. This means that any New Hampshire fire department can be held to any standard, whether adopted or not. Standard of care is another way of saying current accepted practices. The ultimate judge of whether or not a department meets the current standard of care will in all probability be a jury at the end of a civil injury trial.

Perhaps by the next millennium, many standards making bodies will collectively produce safety and health standards. This collaborative effort, if it happens, will go a long

way to speak with one voice to the fire service and eliminate conflicting and competing standards that only serve to confuse and waste the time of the very people the standards are supposed to protect. A higher level of compliance will be realized. Ultimately, this will result in a much safer and focused fire service.

“Thus far, various levels of government have taken an interest in firefighter safety. At the federal level, the Occupational Safety and Health Administration has become concerned with fireground operations, particularly in having appropriate numbers of members on scene before the starting of interior operations.

Also, OSHA is reviewing the use of consensus standards as a source for its regulations. Rather than generate a new mandate of its own, OSHA would use a consensus standard that’s currently being used by a particular industry, such as NFPA standards. This approach may prove to be the way of the future: regulations that reflect government / industry cooperation rather than governmental fiat”. (Loflin,1997)

“With all the science we have at our disposal, with all the improvements we’ve made through the years and with all the additional safety practices we’ve instituted, why are we still losing people?

The answer isn’t simple, of course, but even if it’s complicated, we still can’t seem to get the answer right. Maybe there is no single answer, and the fault lies in multiple factors coming together at various incidents. Most likely this is the case, but it’s incumbent upon us to work diligently at identifying these factors”. (Loeb,1997)

The fact that the population is aging, the fact that Americans are trying to re-establish the neighborhood community and the fact that Americans are desiring a slower pace of life will change the service delivery of the fire service in the next century. More Emergency Medical Service (EMS) calls will appear, infrastructure will continue to erode and need repair, “partnerships begin to evolve between state and local officials and businesses with regard to regulatory functions, trying to reconcile public safety needs with private interests”. (Bruegman,1997) Perhaps in this transition period, a renewed interest in occupational safety and health issues will emerge and the fire service will benefit from less injuries and deaths.

RECOMMENDATIONS

The first recommendation arrived at as a result of the research is to advise all that read this project to increase their personal knowledge and awareness of occupational safety and health issues as they relate to their own situation. Those officials should take every step possible to increase awareness of the safety issues, and become familiar with the departments and the regulatory agencies that also have a stake in the process. It is going to take time and effort, but the leaders should be diligent as it is a most honorable journey. It will be kind of like eating an elephant. It has to be done one bite at a time and it will seem to take forever.

Fire agencies should focus efforts on understanding which safety and health agencies they should deal with, particularly if mutual aid response out of state is a reality. They should develop a working relationship toward compliance with as many aspects of the standards as possible. The agency should set reasonable and achievable goals toward

compliance and then establish effective objectives in order to accomplish the goals. The agencies should not forget the adjoining state's safety and health concerns and strive to develop a compliance plan for those as well, especially if mutual aid responses are possible on a regular basis. The number of exposed mutual aid departments could double very easily based on their geographic proximity to the neighboring state. These departments should be proactive in learning about as many occupational safety and health standards that they can. They should think of this issue as one thinks of insurance, it is expensive to have it but more expensive not to when it is needed.

It is better to have it and not need it than it is to need it and not have it.

New Hampshire Fire agencies should also try to lose the attitude that no agency will investigate incidents. "Many fire departments are plagued with the idea of "good enough." They've done so much with nothing for so long that they are willing to continue that way". (Stevens,1998) Efforts are underway to increase inspections / investigations both at the state and federal levels. Compliance visits will become a regular occurrence at fire departments early in the next millenium and citations / fines will follow.

Finally, agencies should focus more efforts on the education of New Hampshire fire service and work more closely with those at greatest risk. The New Hampshire Division of Fire Training should take the lead and develop workshops and seminars to spread the word and information regarding occupational health and safety for the fire service. Education is the key to understanding a problem. From education comes the way and means to solve problems and issues safely and effectively.

Conclusion

A safe place to work should not be a luxury. A safe place to work is a necessity for the success of every organization. The fire service organization is not and should not be exempt from this process either.

Occupational Safety and Health Standards are promulgated in order to protect the worker. Many organizations produce assistance for the fire service to use as guidance in developing its own safety and health program. The unfortunate outcome of these many efforts leads to confusion on the part of the people the guidance was supposed to protect.

New Hampshire relies on its own State Department of Labor to provide guidance for occupational health and safety. These regulations are general in nature and do not cover the fire service specifically. The federal regulations, do not technically apply either. The reality of the situation is, those specific agencies are not set up to enforce the legislation.

Add to this the New Hampshire state motto: "Live Free or Die" and it is no wonder why occupational safety and health standards, legislation or rules sometimes takes a back seat on the priority list of the operations of the fire department.

The New Hampshire fire service is blessed with caring and concerned individuals and they always do the right thing. However, when the right thing to do becomes confused, expensive and time consuming, the right thing takes a little longer to complete.

Hopefully this research paper has served to put some of the confusion aside and eliminated some of the time it would take to understand the varying positions on occupational safety and health. As far as the expense part goes, safety is expensive, but

when it comes to protecting those that protect us, consider the alternative of not having them.

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